

SEQUENCE LISTING**SEQ ID NO: 1 (MOUSE GCR1/FRAGILIS NUCLEIC ACID)**

Mouse GCR1 (Fragilis) full length nucleotide sequence

5 GCCGCAGAAAGGGCAGACCCGCAGCGCGCTCCATCCTTTGCCCTCCAGTGCTGCCTTTGCTCCGC
 ACCATGAACCACACTTCTCAAGCCTTCATCACCGCTGCCAGTGGAGGACAGCCCCAAACTACGA
 AAGAATCAAGGAAGAATATGAGGTGGCTGAGATGGGGGCACCGCACGGATCGGCTTCTGTCAGAA
 CTACTGTGATCAACATGCCCAGAGAGGTGTCGGTGCCTGACCATGTGGTCTGGTCCCTGTTCAAT
 AACTCTTCATGAACTTCTGCTGCCTGGGCTTCATAGCCTATGCCTACTCCGTGAAGTCTAGGGA
 TCGGAAGATGGTGGGTGATGTGACTGGAGCCCAGGCCTACGCCTCCACTGCTAAGTGCCTGAACA
 10 TCAGCACCTTGGTCCTCAGCATCCTGATGGTTGTTATCACCATTGTTAGTGTGCATCATCATTGTT
 CTTAACGCTCAAAACCTTCACACTTAATAGAGGATTCCGACTTCCGGTCTGAAGTGCTTCACCC
 TCCGCAGCTGCGTCCCTCCTTGCCCCTCCCTACACGCAGGTGTAACACTCATTTATCTATCCACA
 GTGGATTCAATAAAGTGCACTTGATAACCACC

SEQ ID NO: 2 (MOUSE GCR1/FRAGILIS AMINO ACID)

15 Mouse GCR1 (Fragilis) amino acid sequence

MNHTSQAFITAASGGQPPNYERIKEEYEVAEMGAPHGSASVRTTVINMPREVSVPDHVWVWSLENT
 LFMNFCCLGFIAYAYSVKSRDRKMVGDTVGAQAYASTAKCLNISTLVLSILMVVITIVSVIIIVL
 NAQNLHT

SEQ ID NO: 3 (MOUSE GCR2/STELLA NUCLEIC ACID)

20 Mouse GCR2 (Stella) full length nucleotide sequence

GGATCACAGACTGACTGCTAATTGGGTCTTGGTTTTAGGTCTTTTCAAAGACTAAGCAATCTTGT
 TCCGAGCTAGCTTTTGAGGCTTCTGCCCATCGCATCGCCATGGAGGAACCATCAGAGAAAGTCGA
 CCCAATGAAGGACCCTGAACTCCTCAGAAGAAAGATGAAGAGGACGCTTTGGATGATACAGACG
 TCCTACAACCAGAAACACTAGTAAAGGTCATGAAAAAGCTAACCCTAAACCCCGGTGTCAAGCGG
 25 TCCGCACGCCGGCGCAGTCTACGGAACCGCATTGCAGCCGTACCTGTGGAGAACAAGAGTGAAAA
 AATCCGGAGGGAAGTTCAAAGCGCCTTTCCCAAGAGAAGGGTCCGCACTTTGTTGTGCGGTGCTGA
 AAGACCCTATAGCAAAGATGAGAAGACTTGTTCGGATTGAGCAGAGACAAAAAAGGCTCGAAGGA
 AATGAGTTTGAACGGGACAGTGAGCCATTCAGATGTCTCTGCACTTTCTGCCATTATCAAAGATG
 GGATCCCTCTGAGAATGCGAAAATCGGGAAGAATTAGGAGCTTACATTGTACGCTGCCCTGGCTG
 30 TCGACGATGCCGCACAGCAGATGTGAAAGCTATTTTTTGTTTAAGATTAACTTTTTCTGGTGCT
 GGGAAATCTTAACCTTGTAACTTTAAATTGTAGATAGGATGCACAACGATCCAGATTTATGTGA
 AGTTTAGAAGCCTCAAGCTGTGAGGCCAGGGCTGAGGAATAAAGTAAATAGAATTTGGAGTATG
 TACGTTCTAATTTCCAGAAATTTGTAATAAAAGCATTTTTTGT

SEQ ID NO: 4 (MOUSE GCR2/STELLA AMINO ACID)

35 Mouse GCR2 (Stella) amino acid sequence

MEEPSEKVDPMKDPETPQKKDEEDALDDTDVLQPETLVKVMKKLTLNPGVKRSARRRSLRNRIAA
VPVENKSEKIRREVQSAFPKRRVRTLLSVLKDPIAKMRRLVRIEQRQKRLEGNEFERDSEPFRCCL
CTFCHYQRWDPSENAKIGKN

SEQ ID NO: 5 (Rat GCR2 Homologue Nucleic Acid)

- 5 Rat GCR2 (Stella) homologue genomic sequence; similar intron-exon structure as
mouse-Stella. AC094826 contig No.5 (22671 - 27595: contig of 4925 bp in length)

CCCCCCCCCCCCCCCCCCCCCTCCCCCCCCCCCCACCTCCGACGTATGATGGCTCCTAGACGCA
ACACGAAGCGGACTCCCCGCATCATTCACGTAGACCCGCCTTCTGCTTTCCTGTGCGGGTTTTG
10 GGAAGCCCGGCGGCCCTCTCTTCTCACCTTGCTCCACTAGCACGCGGCTGTTTTCACTGAGCCCA
GCACTGGCTAAGTGGAGCACCAGGAGTTTCAGGCTATCCTTCAGAGGGCAAGGTGTAGTCCATGG
TGGGCTACAGGAGACCCTCTCTCTCCGTGAGTACAGAGAGGCCAAACCCAAGCCAGACAGGGGTGA
TGATTAGGAACATACCTTCGTGCGGGAGAAAATACCGGTTTCATATAGGAATAAGAGGAACCAGGA
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15 CTGAGTTTTTATGATGGTGTAGAATTTCTTATCAGCAATTGGTCTCCGCGGTGTTTCTTTTTCT
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20 CGCTAGGATTAAAAGTGCTGCGCCATGATCCTGCTGTAGCTTTATTTTTATTTATTTATTTATTT
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25 TTCATTTGAACCGGGGCTTTTTCTTTTTCTCACCCACTTTCTGGAAGCGATTTTCCTGCTAAATT
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TGATACCTCCTAGCACTCCGGGCTGAGGGCGTGGCTCGGGAGGAGCCATTCTTTGGAGAGGAAA
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GATTCTTTAGTCTTTGTTTGGGAGATTTTCAAATCTTGAGACTGCTCAACCCTTCCTGGCCTAAC
30 ACTCACAAGGCCAGGCTAGACCCAAATTCTGTCAACCCCTTCTGTGTCCAAACGGTGGGTGGCT
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AAAATAGGACCATCTACTGGGTGTGGTCCCATGTAAAGCAAGGTTGGTTTCCCAAATAACCCTGT
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35 ACAATTGGCTGCAGGGGTCTCTGGAAGAGGTGTGAGACAAGAGAGAATATGCAGGTTTCAGGACC
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AAGCTCAGTGGATCTCTACAAACACTAGGATATCTGCTCAGGGTTTATGACCAGGCCCTGTGCAT
ATGGTTTGCTTCTTGTTGGCCCCCTCTCTTGAAGAGGGGTGATTATCTGTTACCCACTTCCTTGTT
TCTCTGGGGTATTACCTTGCAAAATGCAAAATGATATACTTCACTAATGTCTCCATCTTCTGTTT
40 CAGAAATCCTACAACCAGAAACACTAGTAAAGGTCATGAAAAAGCTAACCCCTGAACCCCACTGCC
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CGGGGCATAGATCTAAGAGCAACTCTAGCCTCAGGAATGGCACCTAGGTAAACAGGGAATGTAG
45 ACAAGGATAGTGACTACCTGTGATTCCAGCTCAAGAAAACAAGCTCCAAGGCTATCCTCTACTG
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CGGTGCTAGGCTTTTGAGTGATAAGGCTGACTTAGACTGGATCTCAGAGCTGAAGTGGACCTGTT
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TTAAC TTTGTCTTAATAGTAATTTGAGTAATTTTGTTTTTCTCTTGAAGATTGAGCAGAGACAAA
 GACAGCTTGAAGGAAATGAGGTAAATGCATATGGATGGGTAGGGTGTCTATGGATGGGTAGGGTG
 TCTTGTTTTTACTGTTTCCTTAGACAAGGAGTGTGTATGTGGAGAGTTACCTTCTCAACACAGGG
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 CATGCAGCAGATGTGAAAGCTGTTTTTTTGTTTAAGATTAACTTTTCTTGGTGCTGGGGAAATC
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 TGGGTGTGTGATGTTTCAGAGTTCAATGTGTGCTACCTGTATTTCTGCTTGAGGCAAGGTCTCCA
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 15 CTTGTCTGGCAAGATCTGGAAGAGGCTTGATGTTTGTGTTTGTGCTGTGTAATAACAATTGGTTG
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 ATAATTGTATGCTTTATTTCTTGAGAGAAGTGTGAGGAAGGAGGAGTTAGGAAGAAAGCCCCAG
 GCTGGGGTTAAGAGCACTGGCTGCTTTTCCAGAGGTCCTGAGTTCAATTCCCAGCAATCACCTGG
 TGGCTCCCGAACATCTGTAACAGGATCCAATGCCCTCTTTTGGTGTGTCTAAGAACTCCCTAGGC
 20 ATGCAGAGGATTTTTGTTTTTGTGTTTTTTTTTTTTTTTTTTTTTCGTTTTTTTCAGAGCTGG
 GGAACCGAACCCAGGGCCTTGCGCTTGCTAAGCAAGCGCTCTACCACTGAGCTAAATCCCCAACCC
 CCTACAATGGCCTTTTTCTACCTGCTTTTGAATTATCAATAAAAGACTGGGGCAAAGAAAGGCT
 GGAGTGAATGAGAGAGAACATGTGAAGAGTAAATGAGAGAGAGCATGAGGGAATGAATGAGAGAG
 TGAATGTGAGAACGAATGTGAGAGCGAGTGAGAGAACATGAGAAGAACACGTTAAGAGTGAGTGA
 25 AGAGAGAATGTGAGGTGTGTATGAAGATTGTGTGTGGGGTTGGGGATTAGCTCAGTGGTAGAGT
 GCTTGCCTAGGAAGCACAAGGCCCTGGGTTCCGGTCCCCAGCTCCAAAAAAAAGACCCAAAAAAA
 AAAAAAAAAAAAAAGATTGTGTGTGTGTGTGAAAGGAGAGTGCATGTGGTGTGTGTGAGATATGTG
 CAAGGTGTGTATCAAGAGTGTGTGTGAGAGTGAAAGGGTAATGAACAGAGGTGTGCATGAGCGTG
 GGAGTTTGAGAAAAGAAAACAGCAATAAAAAAAAAAAGCAGAGTGCACGAGAGAATGCAGAGTGTG
 30 TGCAACCTCAAGCTGAGACAGAGACAGAGAGAAAGAGAGAGAGAGAGAGACTTTAAGCCTTGA
 AATTACCTGTCAGTTTGTACCCAAATAGTAGTCTGTGTATATTTATTTTGAGCCTTCCAGATCCC
 TGCTTCCAGTGGAGAACTCTGATTCTATGTTGAGGCTGGACCCTGGCAATAGTGGGCTTCTTGAA
 AAATAGTCAAAGGAAACAGTGCTACACCATGGACTTAAGCCTTTAGACTCAGTTCTGGCTTCAAG
 AGCAGCTGTGAGAAAATAAGTGATGAACTACTTGACAGTCGAACTCGAATC
 35

SEQ ID NO: 6 (Rat GCR2 HOMOLOGUE NUCLEIC ACID)

Rat GCR2 (Stella) homologue genomic sequence; different intron-exon structure
 from mouse-Stella (fused exons). AC097234 (131006 132449: contig of 1444 bp in
 length)

40 CCAGGATTCAGACGAGCTAGGCCTCATGCATGGAGACCTTGCCTCAAGCAGAAATAAACAGGGTA
 GCACACATTGAACTCTGAACATCACGAGTGTGCACACACCCACACATGCATCTGTAAAAACGAG
 TCCCCATCTCCAATGGCTCGTTCTAATCTGTTCTGTGTATTTATTAAAGATAACAAATTTGCCTC
 TATTACAAATTTCTCTGCAAACTAGAAAATCTAAAATAAAAGATCTATTCCAATTACCTTCTAAA
 TCAAACCTACCGGGCTTTGACTCATGCTCAATTTCTTGGGTAAATCTGTCAATTCCCATGAATCCAAA
 45 TGTCACACATCCTATATAATTTAAAGGTTAGCAAGTAGAGATTTCCCCAGCACCAAGAAAAGTTT
 AATCTTAAACAAAAAACAGCTTTTACATCTGCTGCATGGCACCGTTAACGGCAAGGACAGTGTA
 TGATTCAAACCTGCCCTAATTCTTCTGGTTCTGCCCAATTTTAGCATTTCTCAGAAGGATCCCATCT
 CTGATAATGGCAGAAAGTACAGAGACATCTGAATGGCTCAACTCTTCTCTCATTTCTTCAAGCT
 GTCTTTGTCTCTGCTCAATCCGAACAAATCTTCTCATCCTTGCTATGGGGTCTTTCAGCACCGAC

AACAGTGTGCGGACCCTTCTCTTGGGAAAGGCGCTTTGAACTCCCCTCATGATTCTTTCACTTCT
 GTTCTCCACAGGCTGGCTCTTAATCTGGAGACGAACCCTTTGACGAAGATGATATTTTGGCCGAT
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 5 TTCCACCTCCCCACACAGACAAAAACAACCCTATTTTTTTCTTTACAACCCCGCCTAAGCAAGCG
 AAGCATTAGTAACCTGACCAATCATAGAAAGGAAACACCACCAGACCACATCAAATAAAATAAAAT
 CACCGCCCAACCCCAACCCTATAAAAAACCCGCCGACCACACCACATATACTCCCCCCCCCCCCGC
 ACCATCACTACATCACCTCTCCACCCATTCCACCTCCCCCCCCCAACATTAACCCCAACCCCATC
 ACGGAAACCCCAACACCAACAAATAAATTAGACACATCGCATTACATAAATTGACACAAGACCC
 ACCCCAAAAGAGCAGCAAAGATTAGAGCCACATCCTCGGCCCAACACAATACACTCAACCTGCAT
 10 AGTATCTATCTCCACCCCAACCTAGAAACAAAAATCTAATCAGCACCAGGCACCCAAGTATCACG
 CAACTCAAAAACATACCCACCAATTAAACACGCCCAACCAACCAACCCACCCGCCTGACA
 ACACACTTCGGAACCTACCCTCAACATCACCAAAGCAATCGCAAGTTACGATGACTCCAACCACC
 TCACTCTCTCATTG

SEQ ID NO: 7 (Rat GCR2 Homologue Nucleic Acid)

15 Rat GCR2 (Stella) homologue genomic sequence; different intron-exon structure
 from mouse-Stella (fused exons). AC093991 (1 - 7657: contig of 7657 bp in length)

ACTGCAAGTAGTTCATCATTTACAGATCAAAAGAAAGAAGAATAAAAAACAAGGTGTCATGATC
 CCTCCAAAAGAGTGGAACACTTCAACTGCCAGATCCAAGATACTGAAATGGGTAGCATGCTGGAG
 AAAGAATTCAAAAGTTAGGTAGAGAATCTGGTTGAGCAGAGCACTTGCTTTTCTTCCAGAGGATC
 20 TGAGTTCAGTCCCAGGACCTATATCACAGTTTTCTGTAACCTCTAGCTCCAGAGGGTCTGACACT
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 25 CAGGCATACACAATGAACCTGCACACATACAAAAGTCCATAGAGCCATAGTTACCATTGTGAGCT
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 20 CAGTTCTAAAGGACAATGTTTAATCGGGGCTGGCTCACAGGTTTCAGAGGTTTCAGTCCATTATCAT
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 GATCCAAAGGCAGACCAAAAAAAGACTGGCTTACGGGCTTACCATAAGCAGCTAAGAGGAAGGT
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 25 CCCCTGCTTTTACCTAAGCTCATTAGGCAGCAATATGCCTCTTATTGTTTGAGCTCAGCATCCTG
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30 **SEQ ID NO: 8 (Rat GCR2 HOMOLOGUE NUCLEIC ACID)**

Rat GCR2 (Stella) homologue genomic sequence; different intron-exon structure from mouse-Stella (fused exons). AC103122 (11084 - 13244: contig of 2161 bp in length)

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15 TCAAATTGACAACCAACCAGCCAGCACACAAACANTTAAAAGATAGAAATAATGTTAGTGNNTC
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SEQ ID NO: 9 (RAT GCR2 HOMOLOGUE NUCLEIC ACID)

Rat GCR2 (Stella) homologue genomic sequence; different intron-exon structure from mouse-Stella (fused exons). AC099436 (1 - 21688: contig of 21688 bp in length)

[illegible]

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